APPARATUS AND METHODS FOR CLEANING AND PRIMING OF COATED SURFACES

ABSTRACT

Apparatus and methods for cleaning and repairing a thermal barrier coating on a component designed for use in a hostile thermal environment, such as turbine, combustor and augmentor components of a gas turbine engine. The apparatus is a handheld tool that includes an applicator and a fluid dispensing unit. The method involves use of the apparatus to clean and repair a damaged coating such as a thermal barrier coating on a coated article. After cleaning the surface area of the component exposed by the localized spallation using a first apparatus, a second apparatus is used to apply and distribute a liquid mixture such as a primer or a coating repair composition the damaged area of the coating. The cleaning and repair methods can be performed while the component remains installed, e.g., in a gas turbine engine.